

Notice of Allowability

Application No.

10/536,763

Examiner

Chuc D. Tran

Applicant(s)

IKEDA ET AL.

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/16/07.
2. ☒ The allowed claim(s) is/are 1,3-5,7-36 and 38-70.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 5/26/05;9/11/06
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 8/2/07.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 2003-136757, filed on 5/15/03 and Application No. 2003-140456 filed on 5/19/03.

Drawings

2. The drawings were received on 5/26/05 and 4/4/07. These drawings are accepted.

EXAMINER'S AMENDMENT

3. In Applicant specification, line 6, please add - - This application is a 371 of PCT/JP 04/06999 05/17/2004 - -.
4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Patrick G. Burns on July 26, 2007.

The application has been amended as follows:

Claim 1, line 5, "said metal exterior having an outer case and a caseback" has been changed - - said metal exterior parts having an outer case and a caseback - -;

Claim 1, line 13, "and wherein, said watch dial is made of a non-metallic material" has been changed to - - said watch dial is made of a non-metallic material, and said metal exterior

Art Unit: 2821

parts are set so that the thickness of a body member of said metal exterior parts is 300 μ m to 5000 μ m.

Claim 5, line 6, “ and wherein at least a part of said metal exterior parts has an electrical resistance value that is different from another part of said metal exterior parts” has been changed to - - at least a part of said metal exterior parts has an electrical resistance value that is different from another part of said metal exterior parts, and said metal exterior parts and said antenna are set so that a gap between an inner surface of said caseback and said antenna is 100 μ m to 700 μ m - -.

Claim 18, line 11, “ so that said antenna overlaps with said watch dial in a planar manner, and wherein said watch dial is made of a non-metallic material, and wherein said outer case and said caseback member are mutually joined together, the mutual peeling force between said outer case and said caseback member being 104 N • m to 6.0 N • m” has been changed to - - so that said antenna overlaps with said watch dial in a planar manner, said watch dial is made of a non-metallic material, said outer case and said caseback member are mutually joined together, the mutual peeling force between said outer case and said caseback member being 104 N • m to 6.0 N • m, and said metal exterior parts and said antenna are set so that a gap between an inner surface of said caseback and said antenna is 100 μ m to 700 μ m - -.

Claim 19, line 11, “ so that said antenna overlaps with said watch dial in a planar manner, and wherein said watch dial is made of a non-metallic material, and wherein said outer case and said caseback member are mutually joined by a screw mechanism, the mutual loosening torque between said outer case and said caseback member being 0.1 N • m to 6.0 N • m, and preferably being 0.2 N • m to 3.5 N • m” has been changed to - - so that said antenna overlaps with said

Art Unit: 2821

watch dial in a planar manner, said watch dial is made of a non-metallic material, said outer case and said caseback member are mutually joined by a screw mechanism, the mutual loosening torque between said outer case and said caseback member being $0.1 \text{ N} \cdot \text{m}$ to $6.0 \text{ N} \cdot \text{m}$, and preferably being $0.2 \text{ N} \cdot \text{m}$ to $3.5 \text{ N} \cdot \text{m}$, and said metal exterior parts and said antenna are set so that a gap between an inner surface of said caseback and said antenna is $100 \mu\text{m}$ to $700 \mu\text{m}$ - -.

Claim 33, line 8, “is shorter than the maximum diameter of the metal exterior parts” has been changed to - - is shorter than the maximum diameter of the metal exterior parts, and said metal exterior parts and said antenna are set so that a gap between an inner surface of said caseback and said antenna is $100 \mu\text{m}$ to $700 \mu\text{m}$ - -.

Claim 54, line 2, “any one of claims 1, 3, 5, 18, 19 or 33, wherein said metal exterior parts and said antenna are set so that the thickness of a body member of said metal exterior parts is $300 \mu\text{m}$ to $5000 \mu\text{m}$ ” has been changed to - - any one of claims 3, 5, 18, 19 or 33, wherein said metal exterior parts are set so that the thickness of a body member of said metal exterior parts is $300 \mu\text{m}$ to $5000 \mu\text{m}$ - -.

Claim 55, line 2, “any one of claims 1, 3, 5, 18, 19 or 33, wherein said metal exterior parts and said antenna are set so that the thickness of a body member of said metal exterior parts is $500 \mu\text{m}$ to $2000 \mu\text{m}$ ” has been changed to - - any one of claims 1, 3, 5, 18, 19 or 33, wherein said metal exterior parts are set so that the thickness of a body member of said metal exterior parts is $500 \mu\text{m}$ to $2000 \mu\text{m}$ - -.

Claim 58, line 2, “any one of claims 1, 3, 5, 18, 19 or 33, wherein said metal exterior parts and said antenna are set so that the thickness of a caseback member of said metal exterior parts is $100 \mu\text{m}$ to $5000 \mu\text{m}$ ” has been changed to - - any one of claims 1, 3, 5, 18, 19 or 33,

Art Unit: 2821

wherein said metal exterior parts are set so that the thickness of a caseback member of said metal exterior parts is 100 μm to 5000 μm - - .

Claim 59, line 2, “any one of claims 1, 3, 5, 18, 19 or 33, wherein said metal exterior parts and said antenna are set so that the thickness of a caseback member of said metal exterior parts is 300 μm to 2000 μm ” has been changed to - - any one of claims 1, 3, 5, 18, 19 or 33, wherein said metal exterior parts are set so that the thickness of a caseback member of said metal exterior parts is 300 μm to 2000 μm - - .

Claim 60, line 2, “any one of claims 1, 3, 5, 18, 19 or 33, wherein said metal exterior parts and said antenna are set so that a gap between an inner surface of said caseback and said antenna is 0 to 5000 μm ” has been changed to - - any one of claim 1 or 3, wherein said metal exterior parts and said antenna are set so that a gap between an inner surface of said caseback and said antenna is 0 to 5000 μm --.

Claim 61, line 2, “any one of claims 1, 3, 5, 18, 19 or 33, wherein said metal exterior parts and said antenna are set so that a gap between an inner surface of said caseback and said antenna is 100 μm to 700 μm ” has been changed to - - any one of claim 1 or 3, wherein said metal exterior parts and said antenna are set so that a gap between an inner surface of said caseback and said antenna is 100 μm to 700 μm - - .

Claim 66, line 2, “any one of claims 1, 3, 5, 18, 19 or 33, wherein a non-magnetic material having an electrical resistivity of 7.0 $\mu\Omega \cdot \text{cm}$ or less is fixed to an inner surface of said metal exterior parts” has been changed to - - any one of claims 1, 3, 5, 18, 19 or 33, comprising a non-magnetic material having an electrical resistivity of 7.0 $\mu\Omega \cdot \text{cm}$ or less is fixed to an inner surface of said metal exterior parts - - .

Claim 67, line 2, "any one of claims 1, 3, 5, 18, 19 or 33, wherein said non-magnetic material is one material selected from a group consisting of gold, a gold alloy, silver, a silver alloy, copper, a copper alloy, brass, aluminum, an aluminum alloy, zinc, a zinc alloy, magnesium, and a magnesium alloy" has been changed to - - any one of claims 1, 3, 18, 19 or 66, wherein said non-magnetic material is one material selected from a group consisting of gold, a gold alloy, silver, a silver alloy, copper, a copper alloy, brass, aluminum, an aluminum alloy, zinc, a zinc alloy, magnesium, and a magnesium alloy - -.

Allowable Subject Matter

5. Claims 1, 3-5, 7-36 and 38-70 are allowed.

6. The following is an examiner's statement of reasons for allowance:

Prior art fails to disclose or suggest in combination with the remaining claimed limitation:

(a) a metal exterior parts is configured so that said antenna can receive magnetic flux from outside said metal exterior parts, and can resonate, said watch dial is made of a non-metallic material, and said metal exterior parts are set so that the thickness of a body member of said metal exterior parts is 300 μ m to 5000 μ m in claim 1.

(b) a metal exterior parts is configured so that said antenna can receive magnetic flux from outside said metal exterior parts and can resonate, said watch dial is made of a non-metallic material, said electronic watch includes a solar cell, which serves as the drive power of said watch movement, between said watch dial and said watch movement, said solar cell being substantially formed by a material that is non-metallic material and that is also magnetically permeable in claim 3, claims 4 and 60-61 are allowed since they are dependent on claim 3.

(c) a metal exterior parts is configured so that said antenna can receive magnetic flux from outside said metal exterior parts, and can resonate, at least a part of said metal exterior parts has an electrical resistance value that is different from another part of said metal exterior parts, and said antenna are set so that a gap between an inner surface of said caseback and said antenna is $100\ \mu\text{m}$ to $700\ \mu\text{m}$ - - in claim 5, claims 7-17, 20-31 and 38-41 are allowed since they are dependent on claim 5.

(d) a metal exterior parts is configured so that said antenna can receive magnetic flux from outside said metal exterior parts and can resonate, said watch dial is made of a non-metallic material, said outer case and said caseback member are mutually joined together, the mutual peeling force between said outer case and said caseback member being $104\ \text{N} \cdot \text{m}$ to $6.0\ \text{N} \cdot \text{m}$, and said metal exterior parts and said antenna are set so that a gap between an inner surface of said caseback and said antenna is $100\ \mu\text{m}$ to $700\ \mu\text{m}$ - - in claim 18.

(e) a metal exterior parts is configured so that said antenna can receive magnetic flux from outside said metal exterior parts and can resonate, said watch dial is made of a non-metallic material, said outer case and said caseback member are mutually joined by a screw mechanism, the mutual loosening torque between said outer case and said caseback member being $0.1\ \text{N} \cdot \text{m}$ to $6.0\ \text{N} \cdot \text{m}$, and preferably being $0.2\ \text{N} \cdot \text{m}$ to $3.5\ \text{N} \cdot \text{m}$, and said metal exterior parts and said antenna are set so that a gap between an inner surface of said caseback and said antenna is $100\ \mu\text{m}$ to $700\ \mu\text{m}$ - - in claim 19, claims 32 and 35-36 are allowed since they are dependent on claim 19.

(f) a metal exterior parts is configured so that said antenna can receive magnetic flux from outside said metal exterior parts, and can resonate, said metal exterior parts and said

Art Unit: 2821

antenna are set so that a gap between an inner surface of said caseback and said antenna is 100 μ m to 700 μ m - - in claim 33, claims 34, 42-59 and 62-70 are allowed since they are dependent on claim 33.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuc D. Tran whose telephone number is (571) 272-1829. The examiner can normally be reached on M-F Flex hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas W. Owens can be reached on (571) 272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2821

TC

August 2, 2007

Douglas W. Owens 8/6/07

**DOUGLAS W. OWENS
SUPERVISORY PATENT EXAMINER**